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BIRD SURVEYS ALONG THE SANTA CLARA RIVER AND ITS TRIBUTARIES NEAR VALENCIA, CALIFORNIA, 1994

Prepared for:

Mark Subbotin Valencia Corporation 23823 Valencia Blvå. Valencia, Ca. 91355

Prepared by:

Daniel A. Guthrie W.M. Keck Science Center 925 N. Mills Ave Claremont Ca. 91711 (909) 621-8000 x 2836

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Nature and Scope of Surveys

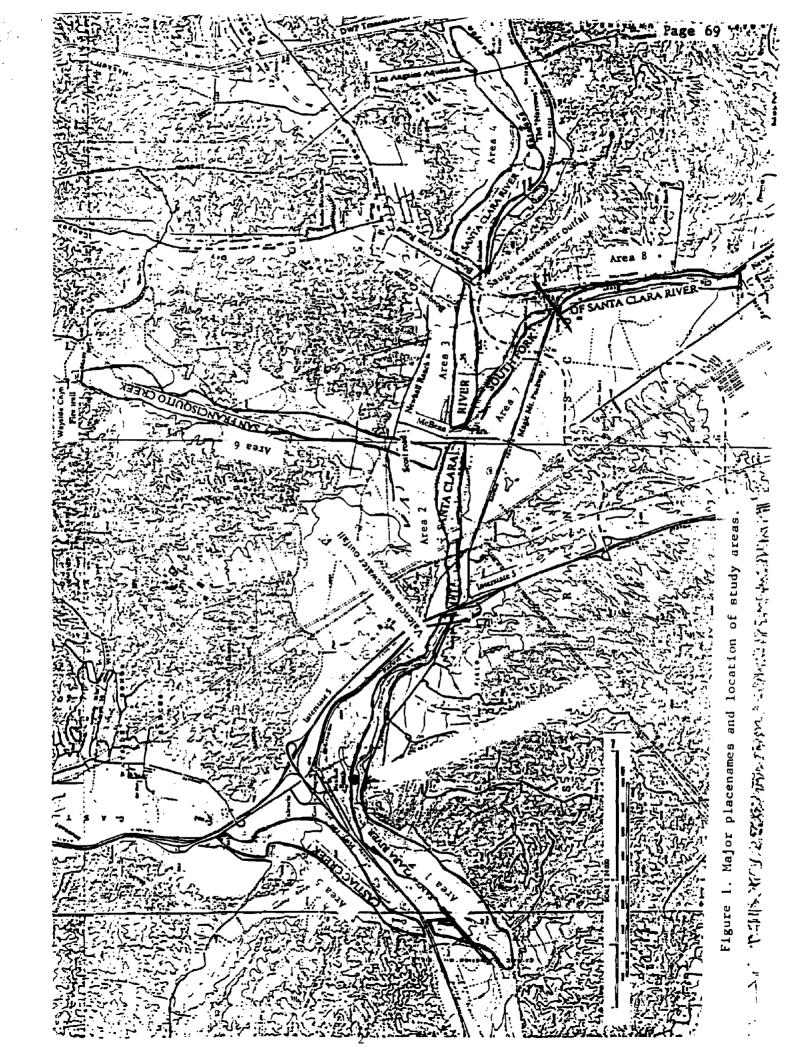
Euring the spring and early summer of 1994 surveys were conducted of a section of the Santa Clara River and its tributaries in the vicinity of Valencia, California to determine presence or absence of least Bell's vireo and other Species of Concern. Numbers of all species observed were noted, and special attention was placed on locating species considered rare and endangered.

Each survey was conducted on foot by observers well acquainted with both visual and auditory patterns of southern California birds. All surveys occurred tween 6 and 10 a.m. After initial surveys, which found no vireos, calls of least Bell's vireo were played during a subsequent census to elicit response from territorial males. Survey routes were designed to cover all areas of each section of the river, with emphasis placed on wetter habitats where least Eell's vireos and other sensitive riparian species are most likely to occur. Fersonnel for all surveys were Daniel A. Guthrie, Richard F. Clements, and Judith A. Sugden.

To facilitate surveys, the area was divided into eight sections (Figure 1). Celineation of the eight areas and comments on each follow. Surveys of the normally dry sections of the river system (Areas 3 - 8) where least Bell's vireos have not been observed during the past 5 years were conducted twice during the nesting season. The second survey was delayed until June to ensure that late arriving species such as yellow-billed cuckoo and willow flycatcher would not be missed. Surveys of the two sections of the Santa Clara River (Areas 1 and 2) where least Bell's vireos have been observed during the last 5 years were conducted according to the protocol outlined by the Fish and Wildlife Service (Appendix 1), except that surveys were not conducted during July. Additional visits were conducted to areas where least Bell's vireos were observed to determine continued presence.

Habitat Condition and Bird Observations.

In general, 1994 was a very good year for riparian habitat along the Santa Clara River. Flooding in 1993 removed much of the dead vegetation from the earlier period of drought and flattened out the river channel. The result was that large areas of sand adjacent to the river remained wet throughout the observation period. The 1994 floods were mild and did not damage developing wet riparian vegetation on these flats. Spring rains also allowed for development of this vegetation.



Tables 1 through 8 present bird observations in each of the specific study areas for 1994. Different species breed at different times of the year. In general, species are most easily observed when they are actively defending territories by song during the establishement of breeding pairs. Once pairs are established and nesting begins song often decreases and the numbers of birds observed, therefore, also decreases. After young leave the nest, numbers observed increase. Thus, for most resident species, numbers of adult birds are most accurately censused in April, when territorial activity is at a maximum. If the species such as Anna's Hummingbird that nest early in the season may be underestimated. Numbers observed may decrease slightly in May and early June when birds are less active during nesting, and increase in late June and July when young birds leave the nest.

Several species that are not considered riparian species but are common in adjacent coastal sage and chaparral habiats come into the riparian zone in late summer when other vegetaional areas are dry. The increase in numbers of lazuli bunting, lark sparrow, house finch, phainopepla and mourning dove in late June follow this trend.

Following are specific comments on the habitat and bird observations in each area.

Area 1. Santa Clara River; Old Highway to the mouth of Castaic Creek and Castiac Creek from this confluence to State Route 126.

Length of section, 3.5 miles. The Santa Clara River flows continuously in this section and is augmented by the Valencia waste water outfall near the upstream end of this section. Although this section was affected by an oil spill during the winter of 1993-4, no effects of this spill were observable at the time of the census. Near Castaic Junction, large flats of wet riparian vegetation were heavily used by red-winged blackbirds, song sparrows and common yellowthroats, all of which were more common than in previous years when these flats did not exist. Virginia rails were also seen regularly in this area and probably nested. In addition, a pond at Castaic Junction, a remnant of an old water cress field, was home to a colony of up to 200 pairs of tricolored redwings, a species not seen in any numbers in previous years.

Area 2. Santa Clara River; Old Highway to McBean Parkway.

Length of section, 1.4 miles. The Santa Clara River flows continuously in The channel is braided and wet riparian vegetation is well this section. developed along this section of the river. Although this section was affected by an oil spill during the winter of 1993-4, no effects of this spill were observable at the time of the census. Repairs to the I-5 and Old Highway bridges were in progress during the census period and probably decreased the number of swallows observed as they nest under these bridges. A slight increase in song sparrows and a large increase in red-winged blackbirds attests to the improved quality of the wet riparian habitat. This area was heavily impacted by off road vehicles during the study period. However, vehicles remained for the most part in the unvegetated section of the river channel. A comparison of numbers of song sparrows per mile nesting in this section (14.3) compared to Area 1, where vehicle disturbance was very minimal (17.1) shows little or no impact. A single least Bell's vireo was observed, and in discussed under Species of Special Concern.

Area 3. Santa Clara River; McBean Parkway to Boquet Canyon Road.

Length of section, 1.2 miles. Water, supplied by the Saugus wastewater outfall at the Boquet Canyon Bridge, is continuous in this section of the Santa Clara River. Riparian vegetation was considerably improved over 1993 as indicated by increase in song sparrows.

Area 4. Santa Clara River; Boquet Canyon Road upstream to DWP transmission lines.

Length of section, 2.3 miles. This section of the Santa Clara River is past years has been wet only briefly during spring rains. In 1994 a water release from the DWP aqueduct 2.0 miles upstream from Boquet Canyon Road kept this section wet throughout the winter and spring and resulted in the development of wet riparian habitat. Numbers of birds increased accordingly. Song sparrows and red-winged blackbirds increased dramatically along this section over previous years and a mallard duck nested successfully.

Area 5. Castaic Creek; Route 125 to Old Road next to Interstate 5.

Length of section, 1.8 miles. Prior to 1993 drought had killed much of the young willows along this section. The floods of 1993 removed the dead wood, but left many barren gravel bars. In 1994 these areas were well vegetated, the vegetation supported by flowing water due to upstream releases during the spring. The result was development of much wet riparian growth. Numbers of song sparrows and red-winged blackbirds increased over previous years and a small colony of tricolored redwings also appeared. A single least Bell's vireo was observed, and is discussed under Species of Special Concern.

Area 6. San Francisquito Creek; Santa Clara River upstream 2.5 miles.

Length of section, 2.5 miles. This section was wet in April and May but dry during June and July. Lue to better development of wet riparian vegetation, song sparrow and red-winged blackbird numbers were up from previous years. Observations of least Bell's vireo and Willow flycatcher are discussed under Species of Special Concern.

Area 7. South Fork of the Santa Clara River; McBean Parkway to Magic Mountain Parkway (Route 126).

Length of section, 1.0 miles. The channel along this section of the South Fork is narrow and very sandy. Almost all vegetation along the bottom of the channel was removed by spring floods. Some standing water was present near the McDean bridge. A great horned owl nested under the rte 126 bridge. This bridge was removed in May for replacement after the owls had fledged.

Area 8. South Fork of the Santa Clara River, Route 126 upstream to Newhall Creek.

Length of section, 1.4 miles. This section of the river was dry except for camp areas formed by runoff from culverts along the west side of the creek. Cattails developed in these wet areas supported fewer song sparrows than in previous years and no redwing blackbirds, perhaps a sign of human disturbance near the wet areas.

General Comments on Habitat Quality

Song sparrows are dependent upon the narrow band of wet riparian vegetation found along permanent streams. The decrease in numbers from 1990 to 1991 is a reflection of the severe drought experience in southern California during this period. Although 1992 was a comparatively wet year, the removal of most wet riparian vegetation by spring floods further reduced the numbers of this species, especially in area 1. In 1993, spring flooding further removed wet riparian vegetation and there was little regrowth prior to the nesting season. Low numbers of song sparrows are an indication of this destruction of wet riparian habitat.

As shown in table 9, during 1994 wet riparian vegetation improved dramatically along Castaic Creek (area 5) and San Francisquito Creek (area 6). Numbers of Song sparrows in areas 2 and 3, the Santa Clara River between I-5 and Boquet Canyon Road, continue to be depressed from high numbers in 1990. This may be one to orf road vehicle damage or simply to slow recovery flowing the 1993 tloods.

Numbers of yellow warblers, another species dependent upon wet riparian vegetation, were up slightly in 1994. Bewick's wren is a common inhabitant of the drier sections of the riparian zone that were not so heavily impacted by spring flooding. Numbers of this species show an increase in 1992 and 1993, wet years, over the numbers in drier 1991. This is presumably due to increases in insect food. The slight decrease in 1994, especially along the Santa Clara River between 1-5 and the confluence with Castaic Creek, may be due to observer concentration on wetter portions of the river.

Comments on Sensitive Species

Cooper's Hawk

Cooper's Hawk is considered a Species of Special Concern by the State of California. Two pairs of Coopers hawks were observed in 1994, the same number as observed in 1992 and 1993. This species is a resident that nests and hunts in riparian woodland habitat.

White-tailed Kite

This species, formerly the Elack-shouldered Kite, is considered "Special" by the State of California. A pair of kites nested in the dry woodland on the north side of the Santa Clara River near the confluence with Castaic Creek.

Willow Flycatcher

This species is considered a Category 1 Candidate for listing under the Federal Endangered Species Act. Willow flycatchers were once widespread in wet riparian woodland in southern California but now only a few individuals exist. The main California breeding populations of this species are along the Kern River

Figure 2. Locations of Least Bell's Vireo and Willow Flycatcher sightings, 1994.

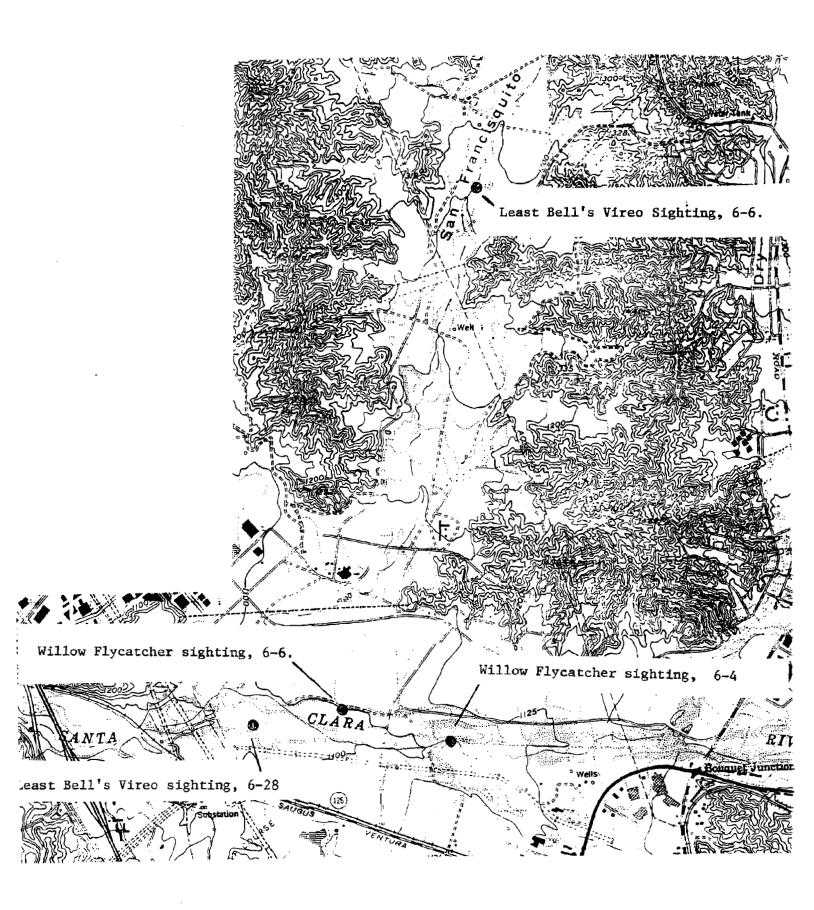
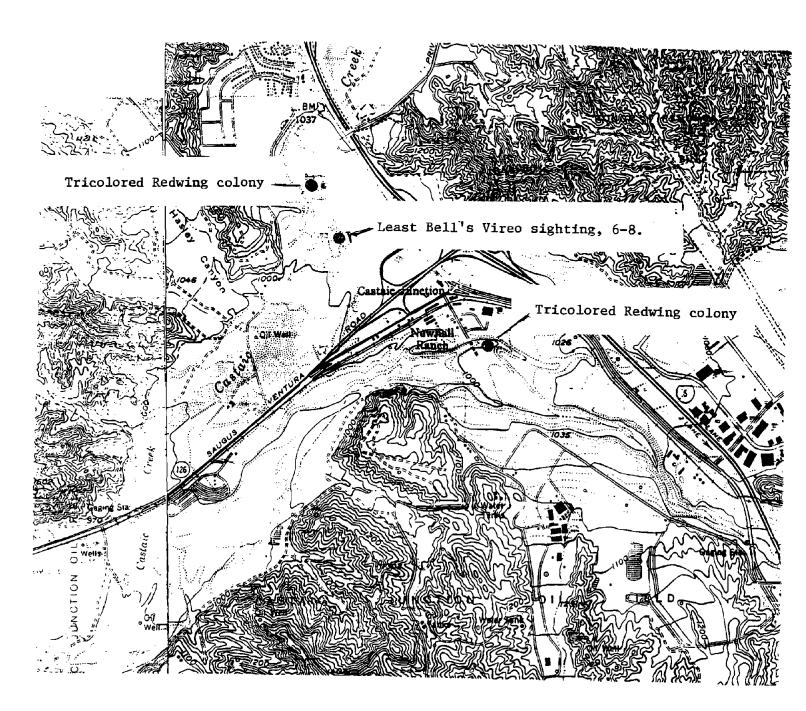


Figure 3. Location of Least Bell's Vireo and Tricolored Redwing Sightings, 1994.



and in northern California. Individuals of this species were observed in late May and early June at locations shown on figures 2 and 3. However, none of these birds could be relocated on subsequent visits. It seems likely that the individuals observed were migrants resting during migration to localities further north.

California Horned Lark

This species is a candidate for listing under the Federal Endangered Species Act. Horned larks were observed near Castaic Junction in plowed fields adjacent to the Santa Clara River.

Least Bell's Vireo

Three least Bell's vireos were observed in 1994 at locations indicated in figures 2 and 3. Only the bird on San Francisquito Creek was singing. The other two cid not sing spontaneously but only in response to a tape. Despite revisits to each of the three locations on two separate occasions, none of the three vireos could be relocated. All observations occurred late in the year and may be of juveniles wandering from their nesting area after fledging. When observed, the birds seemed to move along the stream channels rather than remain in a single location. However, both the Castaic Creek and Santa Clara River Channel localities are in suitable breeding habitat for vireos and should be checked for vireo occurrence in future years.

Yellow Warbler

The yellow warbler is considered a Species of Special Concern by the State of California. Yellow warblers prefer wet riparian habitat but are also found in large cottonwoods in drier riparian areas. Singing yellow warblers were observed along nearly every section of the Santa Clara River and Castaic Creek. A few of the birds observed were probably migrants and this species is known to sing its territorial song during migration. Numbers in 1994 were about the same as those observed in previous years.

Yellow-breasted Chat

The yellow-breasted chat is considered a Species of Special Concern by the State of California. Chats were observed sparingly along the wet sections of the Santa Clara River. Numbers were up from the previous year.

Tricolored Blackbird

The tricolored blackbird is a Category 2 Candidate for listing under the Federal Endangered Species Act. A colony of about 200 breeding pairs of this species occupied a small marsh area along the side of the Santa Clara River at Castaic Junction and another smaller group of about 20 pair nested in a pond beside Castaic Creek (figure 3). Neither of these colonies existed in previous years. Both occur in small pockets of cattail contained in enclosed areas. The pocket on Castaic Creek appears to be an old barrow pit left over from work on flood control dikes. The area along the Santa Clara River was an active watercress field until destroyed by the 1993 floods. Rains during 1994 resulted in standing water and lush growth of cattails in both locations.

Table 1. Biro Observations along the Santa Clara River System, 1994: Santa Clara River from Old Rignway along 1-5 to the mouth of Castaic Creek and Castaic Creek from this confluence to State Route 126.

Species date:	4-12	5-3	5-13	_5-31	6-15	6-28	status
Great Blue Heron	_	_		_	_	_	W, M
Great Egret	1	2	-	1	_	_	W,M
Snowy Egret	1	_	_	_	_	_	W,M
Green Heron	_	_	6	_	2	3	R
Bl. cr. Night Heron	_	_	4	1	2	_	R?
Canada Goose	2	2	_	_	_	_	M
Mallard	4	2	2	2	2	_	R
Cinnamon Teal	3	_	_	_	_	_	14
Turkey Vulture	_	_	1	_	_	_	M
White-tailed Kite	_	1	2	_	_	_	R
Red-shouldered Hawk	1	_	_	1	2	5	R
Red-tailed Hawk	_	1	1	2	ī	3	R
American Kestrel	_	_	2	_	2	_	k
California Quail	12	34	23	12	$1\overline{6}$	20	K
American Coot	2	_	_			_	M
Sora Fail	_	_	1	_	1	_	Αi
Virginia Kail	_	1	2	_	ī	1	R?
Killaeer	14	1 6	14	4	13	10	ĸ
Spotted Sandpiper	_	1	4	6	8	6	S
Solitary Sandpiper	1	_	_	_	_	_	M
Least Sandpiper	5	_	-	_	_	_	M
Common Snipe	ì	_	_	_		_	M
Domestic Pigeon	3	12	26	2	21	9	R
Mourning Dove	4	4	20	17	15	8	R:
Barn Cwl	~	_	_		2	_	Ä
Greater Rozorunner	_	1	1	_	_	_	R
White-throated Swift	_	_	6	1	_	_	A
Vaux's Swift	_	_	30	_	_	-	t ₁
Elack-ch. Hummingbirå		_	1	_	_	2	S
Anna's Hummingbird	1	4	6	5	4	3	F.
Costa's Hummingbird	_	_	_	_	_	ī	S
Nuttall's Woodpecker	2	9	7	13	8	8	R
Downy Loodpecker	3	2	3	1	4	8	F.
Rairy Woodpecker	ī	ī	_	4	4	_	R
eorthern Flicker	2		-	1	-	3	ĸ
Western Wood Fewee	-	-	1	_	_	_	ħ
Pac. Slope Flycatcher	1	_	_	_	_	_	P.
Black Phoebe	1	4	2	4	5	6	R
Ash-thr. Flycatcher	4	14	8	8	14	13	s
Western Kingbira	1	4	2	2	4	3	S
florned Lark	-	Z	2	2	2		K
Violet-green Swallow	-	-	1	-	4	-	٤
N. Rough-w. Swallow	გ	11	24	69	51	36	S
Barn Swallow	1	2	2	-	-	4	М
Cliff Swallow	-	11	4	4	56	21	S

Table 1 (cont.). Bird CLservations along the Santa Clara River System, 1994: Santa Clara River from Old Highway along I-5 to the mouth of Castaic Creek and Castaic Creek from this confluence to State Route 126.

Species	<u>date:</u>	4-12	<u>5-3</u>	<u>5-13</u>	5-31	6-15	6-28	status
Carob Tou		6	12	18	22	12	ර්	R
Scrub Jay American Crow	•	3	10	15	13	11	18	E.
Common Raven	,	9	4	15 6	6	16	11	r. Ř
Plain Titmous		2	16	12	9	15	18	л Д
	e	8	11	22	9 7	25	17	ĸ K
Busntit Bewick's Wrer		ა 28	2 7	35	14	41	17	K K
	ı	20 6	13	33 6	14 6	5	1	ĸ K
House Wren	ش م	5	2	O		5	_	k k
Western Blueb Swainson's Th		<u> </u>	1	_	-	1	_	
			1		_		~	S,M
American Robi	.n		_	_	,	-	2	R
Wrentit	. 5	4	_	_	1	_	_	ĸ
N. Nockingbir		-	_	_	_	2	-	k
Calif. Thrash		1	4	2	5	4	1	R
Cecar Waxwing	,	_	25	25	_	_	-	le, la
Fnainopepla		_	1	1	4	9	9	Ř
European Star	-	10	26	51	12	12	37	ĸ
Solitary Vire		_	1	-	-	-	-	М
Warbling Vire		_	2	-		-	-	M
Orange-cr. V.a		1	1	-	-	-	-	M
Yellow Warble		2	15	4	3	3	4	S
Yellow- r. Wa		20	1	-		-	_	V_{Y} , M
Common Yellow		12	26	11	12	24	29	R.
vilson's Wart	ler	-	11	7 -	-	-	-	M
Yellow-br. Ch	lat	1	-	-	1	2	5	S
Western Tanag		_	16	3	_	-	-	1-1
Black-headed	Grosteak	8	19	17	11	4	26	ప
Elue Grosbeak		-	2	-	-	1	2	٤
Lazuli Buntin		-	14	-	9	4	6	S
Kufous-sided	Towhee	ಕ	5	12	12	9	7	k
California To	whee	2	6	9	6	8	1	Ī.
Savannah Spar	row	4	 -	-	_	-	_	$W_{\bullet}M$
Lark Sparrow		_	-	-	_	_	11	R
Song Sparrow		41	67	55	54	101	96	ĸ
White-cr. Spa	rrow	17	-	-	-	-	~	₩
Red-winged Bl	ackbira	67	152	150	66	65	20	S
Tricolored Re	awing	_	-	300	400	150	2	S
Western Meado		_	2	_	-	_	-	R
Brewer's Blac		-	_	_	10	_		R
Erown-headed		8	38	27	25	24	36	
Hooded Oriole		_	-	_	-	1	-	ន ន ទ
Northern Orio		-	4	6	3	2	10	S
House Finch		2	17	ઇ	2	20	21	K

Table 1 (cont.). Bird Ctservations along the Santa Clara River System, 1994: Santa Clara River from Gld Righway along I-5 to the mouth of Castaic Creek and Castaic Creek from this confluence to State Route 126.

Species	<u> äate:</u>	4-12	5-3	5-13	5-31	6-15	6-28	status
Lesser Goldi	inch	8	2	29	2	б	-	k
Lawrence's (2	_		_	-	_	R
American Gol	dfin c h	б	6	_	-	-		W,M
Total Specie		53	5 7	55	48	54	48	
Total Indivi	duals:	370	700	1037	872	827	589	

Total Species on all visits: 90 Total Probable Ereeding species: 55

Status: M - Migrant; R - Resident; S - Summer Only; W - Winter Only

Censuses of 4-12, 5-13 and 6-15 on north side of river, Censuses of 5-3, 5-31 and 6-28 on south side of river.

Table 2. Bird Observations along the Santa Clara River System, 1994: Santa Clara River from McBean Parkway to Old Highway along I-5.

	S ecies date:	4-12	<u>5-3</u>	5-13	5-31	6-15	6-28	Status
A	Bl. cr. Night Heron	_	_	1	_	_	_	R?
5	Mallarc	4	_	-		_	-	k
5	White-tailed Kite	1	_	-	_	_	-	Ř
7	Cooper's Hawk	-	-	-	1	_	-	k
	Red-shouldered Hawk	1	_	1	1	1	2	K
	-ked-tailed Hawk	-	1	-	-	1	-	, R
L	California Çuail 🕟	6	_	7	2	_	2	R
	Killgeer	3	2	4	4	2	4	
	Spotted Sandpiper	_	_	1	_	_	-	<u>R</u> S
	Domestic Pigeon	-	4	3	_	_	_	k
	Mourning Dove	3	5	2	2	_	3	\mathbf{R}_{-}
Ç1	Creater Koadrunner	-	_	1	_	-	_	
	Black-ch. Hummingbird	2	_	_	-	_	-	R S R
	Anna's Hummingbird	4	1	1	2	-	2	ĸ
	Nuttall's Woodpecker	2	7	3	3	3	8	\mathbf{R}
	Downy Loodpecker		3	-	3 3	2	5	
اور	Hairy Woodpecker	-	_	-	1	3	_	R
I*.	Northern Flicker	-	1	_	1	_	_	Ŕ
	Pac. Slope Flycatcher	-		1	_	-	-	М
	Black Phcebe	_	_	-	3	1	5	R
	Ash-thr. Flycatcher	_	3	1	4	ĩ	5	
AL.	Western Kingbira	_	_	_	_	~	6	s
v.	N. Rough-w. Swallow	10	11	19	6	18	13	S
	Cliff Swallow				_	7	_	ಸ)೧೮೮೮
	Scrub Jay	4	2	2	2	2	7	\widetilde{R}
	American Crow	_	2	2	2 2 2	8	5	Ŕ
η <i>Q</i>	Common Raven	2	ī	ī	2	2	2	R
1	Plain Titmouse	2 2	5	6	6	4	13	F.
	Bushtit	5	_	2	4	3	8	F
	Bewick's Wren	2 1	16	18	11	13	11	A.
	House Wren	3		2	2	1	-	ñ
26	Western Bluebira	_	3	-	2	ī	10	Ŕ
) '	Swainson's Thrush	_	5 3 2 2	2	_	_	-	Î
	American Robin	_	2	_	_	_	-	R
	wrentit	_	_	_	1	7	ı	R
	N. Mockingpird	_	_	1	_	_	_	
11.0	Calif. Thrasher	_	1	_	3	1	_	R
an	Phainopepla	_	_	1	_	_	1	k
	European Starling	2	4	1	3	_	3	R
	Bell's Vireo	_	_	_	_	-	ĭ	r. S
	Warbling Vireo	_	4	_	_	_	_	S M
.,5	Orange-cr. Warbler	10	0	Ö	Ü	_	_	M
4 /	Yellow Warbler	2	10	4	2	2	2	S,M
	Yellow raibler	54	10	-	~	_	-	
	Black-tn. grey Warble		_	_	-	_		No.
	Common Yellowthroat	5	_	3	3	2	5	R R
	Wilson's Warbler	1	6	11	_	_	_	N M
Sb	Yellow-br. Chat	ī	1	-	-	1	_	S
	TOTAL OF S CAMP	_	-			_		J

Table 2 (cont.). Eird Observations along the Santa Clara River System, 1994: Santa Clara River from McBean Parkway to Old Highway along I-5.

Species	date:	4-12	5-3	5-13	5 - 31	6-15	6-28	Status
_			_					
Western Ta	nager	-	5	-	-	-	-	M
Black-head	ed Grosbeak	4	10	7	5	4	8	S
Blue Grosb	eak	-	-	2	-	_	1	S
Lazuli Bun	ting	-	-	-	-	-	1	S
Rufous-sid	ed Towhee	4	4	4	5	3	4	\mathbf{k}
California	Towhee	_	2	1	4	2	-	R
Song Sparr	CW	24	20	21	17	18	42	R
Rea-winged	Blackbird	5	4	20	3	10	-	S
Brown-head	ed Cowbird	4	13	7	6	3	-19	S
Northern C	riole	-	1	-	-	-	2	S
House Finc	h	-	2	-	4	12	18	ĸ
Lesser Col	āfinch	1	7	2	-	5	7	R
Lawrence's	Goldfinch	-	-	-	1	-	-	R
American G	oldfinch	18	-	-	-	-	-	$W_{\bullet}M$
Total Spec	ies:	31	36	35	34	31	33	
Total Indi		210	172	165	121	137	225	

Total Species on all visits: 62 Total Probable Breeding Species: 44

Status: M - Migrant; R - Resident; S - Summer Only; W - Winter Only

Table 3. Bird Observations along the Santa Clara River System, 1994: Santa Clara River from Boquet Canyon Rd. to McBean Farkway.

Cooper's Hawk - 1 R Red-tailed Hawk 1 1 R California Quail 14 12 R Killdeer 2 7 R Lomestic Pigeon 18 - R Mourning Dove 4 6 R Rufous Hummingbird 1 - M Black-ch. Hummingbird 3 2 S Anna's Hummingbird 1 4 R Nuttall's Woodpecker 3 6 R Cowny Woodpecker 3 1 R Northern Flicker - 3 R Willow Flycatcher - 1 S Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 <t< th=""><th>rpecies date:</th><th>4-12</th><th>Ú-4</th><th>Status</th></t<>	rpecies date:	4-12	Ú-4	Status
Red-tailed Hawk 1 1 1 R California Quail 14 12 R Killdeer 2 7 R Lomestic Pigeon 18 - R Mourning Dove 4 6 R Rufous Hummingbird 1 - M Black-ch. Hummingbird 3 2 S Anna's Hummingbird 1 4 R Nuttall's Woodpecker 3 6 R Lowny Woodpecker 3 1 R Northern Flicker - 3 R Willow Flycatcher - 1 S Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbird - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R	Cooper's Hawk	_	1	R
California Quail 14 12 R Killdeer 2 7 R Lomestic Pigeon 18 - R Mourning Love 4 6 R Rufous Hummingbird 1 - M Black-ch. Hummingbird 3 2 S Anna's Hummingbird 1 4 R Nuttall's Woodpecker 3 6 R Lowny Woodpecker 3 1 R Northern Flicker - 3 R Willow Flycatcher - 1 S Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbird - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R		1		
Killdeer 2 7 R Lomestic Pigeon 18 - R Mourning Dove 4 6 R Rufous Hummingbird 1 - M Black-ch. Hummingbird 3 2 S Anna's Hummingbird 1 4 R Nuttall's Woodpecker 3 6 R Lowny Woodpecker 3 1 R Northern Flicker - 3 R Willow Flycatcher - 1 S Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbird - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R				
Lomestic Pigeon 18 - R Mourning Dove 4 6 R Rufous Hummingbird 1 - M Black-ch. Hummingbird 3 2 S Anna's Hummingbird 1 4 R Nuttall's Woodpecker 3 6 R Downy Woodpecker 3 1 R Northern Flicker - 3 R Willow Flycatcher - 1 S Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbird - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bewick's Wren 6 2 R	-			
Mourning Love 4 6 R Rufous Hummingbird 1 - M Black-ch. Hummingbird 3 2 S Anna's Hummingbird 1 4 R Nuttall's Woodpecker 3 6 R Lowny Woodpecker 3 1 R Northern Flicker - 3 R Willow Flycatcher - 1 S Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbird - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R			-	
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Northern Flicker - 3 R Willow Flycatcher - 1 S Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbira - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R				
Northern Flicker - 3 R Willow Flycatcher - 1 S Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbira - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R	_	3	6	
Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbira - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R		3	1	
Black Phoebe 2 4 R Ash-thr. Flycatcher 7 3 S Western Kingbira - 3 S N. Rough-w. Swallow 11 4 S Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R		_	. 3	
Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R		-	1	S
Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R	Black Phoebe	2	4	R
Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R	Ash-thr. Flycatcher	7	3	S
Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R	Western Kingbira	_	3	S
Cliff Swallow 6 - S Scrub Jay 7 14 R American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R		11	4	S
American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R		6	_	.s
American Crow 7 4 R Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R			14	Ř
Common Raven 12 8 R Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R				
Plain Titmouse 4 6 R Bushtit 16 12 R Bewick's Wren 6 2 R				
Bushtit 16 12 R Bewick's Wren 6 2 R House From				D ~
Bewick's Wren 6 2 R				
Woulde Even				
nouse wien i - K			_	
			2	
vestern Bluebird 2 2 R Calif. Thrasher 2 4 R		2	2	
Calif. Thrasher 2 4 R Phainopepla 1 2 R		2	4	
		Ť		
European Starling 1 18 R			18	
Crange-cr. Warbler 1 M			-	
Yellow Warbler $1 \overline{3}$ S			3	
Yellow- r. Warbler 23 - W,M			-	
Black-th. grey Warbler l - M			-	
Common Yellowthroat 6 - R			-	
Wilson's Warbler 4 - M		4	_	
Yellow-br. Chat - 1 S	Yellow-br. Chat	_		รั
Black-headed Grosbeak 3 1 S Elue Grosbeak - 2 S	Black-headed Grosbeak	3	1	S
Blue Grosbeak - 2 S	Blue Grosbeak	-	2	S
Lazuli Bunting - 1 S	Lazuli Bunting	_	1	S
Elue Grosbeak - 2 S Lazuli Bunting - 1 S Rufous-sidea Towhee 4 2 K California Towhee 5 3 R		4	2	K
California Towhee 5 3 R		5	3	
Song Sparrow 15 31 R				
White-cr. Sparrow 15 - W				
Fed-winged Blackbird 5 3 S			3	
Fed-winged Blackbird 5 3 S Brown-headed Cowbird 14 2 S			2	

Table 3. (cont.) Bird Observations along the Santa Clara River System, 1994: Santa Clara River from Boquet Canyon Rd. to McDean Parkway.

Species	date:	4-12	6-4	<u>S</u> tatus
Northern Or	iole	6	_	s
House Finch	ì	6	17	Ã
Lesser Gold	ifinch	3	ຮ	k
Total Speci		41 247	36 201	

Total Species on all visits: 48 Total Probable Breeding birds: 41

Status: M - Migrant; R - Resident; S - Summer Coly; W - Winter Coly

Table 4. Bird Observations along the Santa Clara River System, 1994: Santa Clara River from Fower Line 2.5 miles upstream from Boquet Canyon Rd. to Boquet Canyon Road Crossing.

Species	aate:	4-28	б 4	Status
r allard		2	1(8)	Ř
Reu-tailed	Laurie	1	4	K K
American Ke	•	_	5	k k
California		37	12	R R
Killdeer	Çuarı	18	14	
Mourning Do	200	15	47	<u>k</u> R
Greater Ros		12		R R
Anna's Hum		5	1 2 3 1 3 2 - 3 7	R R
Nuttall's V			2	R R
Northern Fl		1 2	3	K K
Elack Phoel		1	1	<u>A</u> K
Ash-thr. F		1 1		к S
			3	
Western Kir		1	2	<u>မ</u>
N. kough-w.		7	_ >	S
Cliff Swall	LOW	- 17	3 7	S
Scrub Jay			,	k
Common Rave	en	22	9 7	R
Bushtit		10		R
Bewick's Wi		21	9	R
Western Elu	lepira	_	1	_ <u>k</u> _
Wrentit		1	-	R
N. Mockingt		5	4	R
Calit. Thra		5	5	K
Phainopepla		-	7	K
European St		4	18	<u>F</u>
Yallow- r.		1	-	ŗ.
Wilson's Wa		2	-	$\mathbf{P}_{\mathbf{I}}^{\mathbf{I}}$
	ea Grosbeak	-	2 3	S
Rufous-side		Ö	3	r.
California		12	5	<u>K</u>
Song Sparro		7	ប់	- K
Rea-winged		41	38	S
Brewer's Bl		6	6	S
Brown-heade	ea Cowbird	5	3	5
Northern Cr		7	1	SR
House Finch		16	21	R
Lesser Cold	finch	5	9	Ř
Total Speci	.es:	30	33	
iotal Indiv	iduals:	277	2 72	

Total Species on all visits: 37

Total Possible Breeding Species: 32

Status: M - Migrant; R - Resident; S - Summer Coly; W - Winter Coly

() = Young Birds

Table 5. Bird Observations along the Santa Clara Kiver System, 1993: Castaic Creek from Old Road west to Rte. 126.

:

Species date:	4-21	6 - 6	Status
Green Heron		1	R
Bl. cr. Night Heron	_	1	R
Mailard	2	_	K
White-tailed Kite	ī	1	R
Cooper's Hawk	_	ī	<u>K</u>
Red-tailed Hawk	3	2	R
California Quail	35	57	R
American Coot	-	2(1)	R
Killdeer	_	4	Ř
	6 2 2	10	
Domestic Pigeon	2	2	<u>R</u> k
Mourning Dove	3	Z	r S
Black-ch. Hummingbird		-	
Anna's Hummingbird	12	6	k
Costa's Hummingbird	1	_	S
Nuttall's Woodpecker	1	6	R R
Lowny Woodpecker	-	5	
Hairy Woodpecker	_	1	F.
Morthern Flicker	1	-	k
Black Phoebe	-	8	\mathbf{K}
Ash-thr. Flycatcher	5	7	ន្ទ្ធីទ
Western Kingbird	4	2	รั
Violet-green Swallow	3	_	S
N. Rough-w. Swallow	58	14	S S
Barn Swallow	_	1	S
Cliff Swallow	30	68	S R
Scrub Jay	14	17	Ŕ
American Crow	14	13	A
Common Laven	7	17	K
Plain Titmouse	_	12	K
Eushtit	11	46	Ę.
Bewick's Wren	23	18	R K
house Wren	2	2	k
Wrentit	_	1	Ř
Calif. Thrasher	9	8	K
European Starling	17	4	R
Bell's Vireo	-	ì	S
Crange-cr. Warbler	1	_	M
Yellow Warbler	_	2	S
Yellow- r. Warbler	3	-	M,W
Common Yellowthroat	_	8	R
Wilson's Warbler	3	-	$\frac{R}{M}$
Yellow-br. Chat	.	3	
Black-headed Grosbeak	4	7	S C
			S C
Blue Grosbeak	1	7	8 8 8 9 8
Lazuli Bunting	_ 1~	1	ے
Rufous-sided Towhee	17	17	
California Townee	13	13	Ŕ

 $\frac{1}{\sqrt{t}}$

Table 5 (cont.). Bird Observations along the Santa Clara River System, 1993: Castaic Creek from Cld Road west to Rte. 126.

Species	date:	_4-21	6-8_	Status
Song Sparr		44	18	- R
Rea-wingea	Blackbird	40	25	S
Tricolorea	Redwing	_	30	S
Brown-head	ed Cowbird	19	23	S
Northern C	riole	4	2	S
House Finc	h	14	12	${f R}$
Lesser Gol	áf inc h	8	4	R

Total Species: 38 45
Total Individuals: 437 480

Total Species on all visits: 54 Total Possible Breeding Species: 46

Status: M - Migrant; k - Resident; S - Summer Only; W - Winter Only

() = Young Eirds

Table 6. Liro Observations along the Santa Clara River System, 1994: San Francisquito Creek for 2 Miles above Main Channel.

Species da	ite:	4-28	6-6	Status
White-tailed Ki	ite	2	_	ĸ
Cooper's Hawk		_	1	Ŕ
Red-tailed Hawk		1	2	R
American Kestre	21	1	1	R
California Quai	1	128	13	R
Killdeer		7	2	R
Domestic Pigeor	1	_	2	R
Mourning Dove	_	17	26	R
Greater Roadrum	ner	-	1	R
Black-ch. Hummi		2	4	S
Anna's Hummingh		2	4	Ř
Costa's Humming		2	_	R
Nuttall's Woodp		10	10	R
Downy Woodpecke		2	_	R
ierthern Flicke		ī	_	Ŕ
Western Wood Pe		ī	_	М
Pac. Slope Flyc		1	_	M
Willow Flycatch		_	4	s
Ash-thr. Flycat		9	9	S
Western Kingbir		5	2	S
N. Rough-w. Swa	ս 11∩ա	_	6	S
Cliff Swallow	TTOM	_	29	ន
Scrub Jay		13	23	R
American Crow		10	23	R R
Common Raven		8	11	R
Plain Titmouse		2	1	R
Eushtit		10	10	R R
Bewick's Wren		20	15	R
House Wren		10		K
Western Bluebir	ã	-	3 2	k k
N. Mockingbird	u	1		K K
Calif. Thrasher		ક	3	K K
Phainopepla		0	2	A Ā
	na	4	4 3 3 4	ĸ R
European Starli	ng	4	1	
Bell's Vireo	100	_ 1		S
Crange-cr. Warb	Ter	1	1	M
Yellow Warbler	waaL	6	1 1	S
Common Yellowth		6	1	R
Wilson's Warble		6	_	M
Black-headed Gr		6	3	S
Rufous-sided To		8	24	R
California Towh	ee	11	16	R
Song Sparrow		42	40	R
Lincoln's Sparr		1	-	T _v
White-cr. Sparr		4	-	h.
Red-winged Blac		100	26	S
Western Meadowl	ark	14	5	R

Table 6 (cont.). Bird Observations along the Santa Clara River System, 1994: San Francisquito Creek for 2 Miles above Main Channel.

Species	date:	4-28	υ- 6	Status
2201111 11000	ed Cowbirá	12	18	S
Northern C	h	11 22	10 42	S R
Lesser Gol Lawrence's	dfinch Goldf inc h	-	4 2	R R
Total Spec Total Indi		41 527	42 390	

Total Species on all visits: 52 Total Possible Breeging Species: 42

Status: M - Migrant; R - Resident; S - Summer Only; W - Winter Only

() = Young Birds

Table 7. Bird Observations along the Santa Clara River System, 1994: South Fork from Rte. 126 to McBean Parkway.

Species_	date:	4-21	ს -6 _	Status
Red-tailed	Lauk	1	_	
American Ke		1	_	R R
			_	
California	Çualı	8	4	k
Killdeer		4	2	R
Mourning Do		2	3	R
Creat Horne		2	1	R
Anna's Humm	•	1	1	R
Nuttall's W		1	1	R
Northern Fl	icker	-	1	R
Black Phoeb	е	_	2	R
Ash-thr. Fl	ycatcher	-	1	S
Rough-winge		-	2	S
Scrub Jay		3	6	\mathbf{R}
American Cro	OW	1	_	R
Common Rave	n	5	_	Ŕ
Sushtit		_	4	R
Bewick's Wr	en	5	1	k
N. Mockingb.		ĺ	1	Ŕ
Calif. Thra		1	$\overline{1}$	R
Wilson's Wa		4	_	M
California		4	_	K
House Finch	TONIACE	4	7	R R
nodse princin		-	,	K
Total Specie	es:	17	16	
Total Indiv		48	38	

Total Species on all visits: 22
Total Possible Breeding species: 21

Status: M - Migrant; R - Resident; S - Summer Coly; W - Winter Coly

Table 8. Bird Cbservations along the Santa Clara River System, 1994: South Fork from Newhall Crek to Rte. 126.

Species	date:	4/21	6-6	Status
Red-tailed	i Herale	_	1	ė.
		_		Ŕ
California	Chair	2	_	R "
Killdeer		4	5	Ŗ
Mourning D		7	1	R
Anna's Kun		5	2	R
N. Rough-w	. Swallow	2	-	S
Scrub Jay		1	5	R
Common Rav	en	2	3	R
Bushtit		2	4	Ŕ
Bewick's W	ren	4	1	${f R}$
American F	obin	1	-	Ŕ
N. Mocking	birā	2	4	Æ
Phainopepl	.a	1	_	R
European S		2	2	R
	ped Warbler	2	_	М
Wilson's W		1	_	М
California	Towhee	1	_	ĸ
Song Sparrow		5	7	R
Brown-headed Cowbird		_	1	S
Northern Criole		2	1	S
House Finch		2	7	R
Lesser Gol		4	_	Ŕ
Total Spec	ies:	20	14	
Total Indi		52	44	

Total Species on all visits: 22 Total Possible Breeding Species: 18

Status: M - Migrant; K - Resident; S - Summer Only; W - Winter Only

() = Young Birds

Table 9. Comparison of Fogulations of Selected Species, 1990 - 1994.

				Census	Areas	ı				
Species	Year	1_	2	3	4	5	6	7	8	Total
0	1004		20	25	-	4.4	4.0	C	_	100
Song Sparrow	1994	67	20	15	7	44	40	C	5	198
	1993	63	15	6	2	18	11	6	13	128
	1992	63	38	28	2	5	14	7	10	167
	1991	112	30	39	0	9	7	12	24	233
	1990	117	82	36	0	11	16	15	30	307
Yellow Warbler	1994	3	2	2	0	2	1	0	0	10
	1993	5	2	0	0	1	-0	0	0	8
	1992	9	- 5	3	1	0	3	0	0	21
	1991	23	8	2	2	17	4	Û	4	60
	1990	16	20	2	$\bar{1}$	10	Ū	3	ī	53
				_	-		·	J	_	33
Bewick's Wren	1994	28	18	6	21	23	20	4	2	122
Dewick 2 Wiell	1993	51	11	4	26	23 27	9	10	1	139
	1992	35	29	3				8	_	
					10	6	11		~	102
	1991	46	5	8	8	3	13	5	3	91
	1990	77	15	14	27	48	17	7	10	215